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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,641	02/19/2002	Alex Horng	HORN3087/EM	2608

7590 02/21/2003
Bacon & Thomas
4th Floor
625 Slaters Lane
Alexandria, VA 22314

EXAMINER

MULLINS, BURTON S

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 02/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/076,641

Applicant(s)

HORNG ET AL.

Examiner

Burton S. Mullins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nitta (JP 8-149732) in view of either Morohashi et al. (JP 2002-44894) or Hirano et al. (JP 2001-54246). Nitta teaches an insulating jacket (bobbin) structure of a stator of a direct current motor, comprising: a body 21, having a through hole (not numbered; see Fig.1); and multiple extension plates 22, extended outward from the through hole of the body 21 in a radiating manner, each of the multiple extension plates 22 having a receiving recess (not numbered; see Fig.1) whose cross-section is substantially inverted U-shaped (see Fig.1), the receiving recess of each of the multiple extension plates having two sides (not numbered, see Fig.1) having two distal ends.

Nitta differs in that the two distal ends are not each formed with a protruding locking snap. Rather, a snap 4 extending from body 21 is used to connect bobbin body 21 to bobbin body 21.

Morohashi teaches an insulation 2A for core poles 5 including side sections 21a/21b, top section 22 (Fig.2) and an open bottom section (Fig.3) having "stop sections" 24a/24b at the distal ends of the side sections. The stop sections stop the insulation when it is placed on the

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poles so that the relative displacement of the shaft orientations of each insulation piece and the core is regulated.

Hirano teaches an insulation member 601 (Fig.14) including elastically-engaging or snap-coupling claws 701/702 formed at each end of sides 67. This improves manufacture and simplifies construction (abstract).

It would have been obvious to one of ordinary skill at the time of the invention to modify Nitta and provide protruding locking snaps on the distal ends of the sides of the extension plates per either Morohashi or Hirano since this would have been desirable to regulate the displacement of the insulation relative to the core and shaft as well as improve manufacture and simplify construction.

Regarding claims 2-3, note the multiple outer annular plates 23 in Nitta, with gaps therebetween (Fig.1). These also form "protruding" plates since they extend axially.

Regarding claim 4, the stops in Morohashi as well as the claw sections 701/702 in Hirano make one end of their respective extension plates smaller in width than the other.

Regarding claim 5, note the steel-plate laminate stator/hub 3/12 assembly in Nitta including multiple poles and multiple pole faces, with each of the poles of the silicon steel plate assembly received in the receiving recess of each of the multiple extension plates of the insulating jacket. The snap connections of either Morohashi or Hirano would snap and lock against the lowermost plate. Further, in Nitta, the hub of the silicon steel plate assembly is located in the through hole of the insulating jacket body (Fig.1), and each of the pole faces is located outside of each of the multiple outer annular plates (Fig.1).

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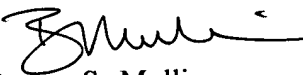
Regarding claim 6, the stops in Morohashi as well as the claw sections 701/702 in Hirano make one end of their respective extension plates smaller in width than the other.

Regarding claim 7, note the multiple outer annular plates 23 in Nitta (Fig. 1) form "protruding" plates which extend axially.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 305-7063. The examiner can normally be reached on Monday-Friday, 9 am to 5 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are 305-1341 for regular communications and 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0956.


Burton S. Mullins
Primary Examiner
Art Unit 2834

bsm
February 17, 2003